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| 10/693,437 | 10/24/2003 | James R. Richter | 09793953-0040 | 2007 |

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SONNENSCHN NATH & ROSENTHAL LLP
P.O. BOX 061080
WACKER DRIVE STATION, SEARS TOWER
CHICAGO, IL 60606-1080

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| EXAMINER |
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PATEL, VISHAL A

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| ART UNIT | PAPER NUMBER |
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3676

DATE MAILED: 10/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,437

Applicant(s)

RICHTER, JAMES R.

Examiner

Vishal Patel

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/23/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 19 recites the limitation "the other block" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 12-15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Freiwald (DE3425641 A1).

Regarding claims 12: Freiwald discloses a seal unit for forming a seal between a pipe (6) extending axially through a cylindrical hole (hole formed in 12) and the pipe is positioned eccentrically in the hole (hole formed in 12). The seal unit comprising a plurality of resilient compressible elastomer (foam is considered to be an elastomer because elastomer meaning any of various elastic substances resembling rubber, as defined in Merriam-Webster's Collegiate Dictionary, Tenth Edition) seal blocks (blocks 1, 3, 5 and 4) having a fixed height, thickness and a width. The blocks being connectible (the blocks are joined together to form a ring) to each other to form a ring (the blocks form the ring) having a thickness of each block being arranged in a radial direction to the ring, a thickness of the block varying from block to block (this is the case

Art Unit: 3676

because blocks 1, 5, 3 and 4 all having different thicknesses), with a smallest thickness (thickness of block 3) being arranged diametrically across from a largest thickness block (thickness of block 5) in the ring, with intermediate blocks (blocks between 3 and 5) between the smallest thickness block and the largest thickness block having progressively increasing thickness leading from the smallest thickness block to the largest thickness block in each circumferential direction.

Regarding claim 13: Some adjacent blocks have identical thickness (both of 3 have identical thickness).

Regarding claim 14: Some adjacent blocks have identical widths (width of 4).

Regarding claim 15: The width of the blocks may vary from block to block (the width varies from block to block, where 5 has the largest width, 3 has the smallest and other blocks between 5 and 3 have other widths).

Regarding claim 17: The block (any of blocks 1, 3, 4 and 5) have a height oriented in an axial direction (the blocks have a height oriented in an axial direction), the width is oriented in a circumferential direction and the thickness oriented in a radial direction relative to the pipe. The block having an arcuate shape (all blocks have an arcuate shape since the blocks form a ring) and a thickness at one circumferential end of the block is less than a thickness at an opposite circumferential end of the block (this is the case form all blocks 3).

5. Claims 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kortmann.

Kortmann discloses a seal member for forming a seal between a pipe extending axially through a cylindrical opening (member 3 extending through a hole). The seal member comprising a resilient compressible elastomer seal block (block formed by 9 and 10), the block

Art Unit: 3676

having a height to be oriented in an axial direction relative to the pipe, a width to be oriented in a circumferential direction to the pipe and a thickness to be oriented in a radial direction relative to the pipe (the block has a height, width and thickness). The thickness varies from a smallest dimension to a largest dimension such that a thickness at one circumferential end to the block is less than a thickness at an opposite circumferential end of the block. The block has a passage (passage where bolt 18 lie) extending therethrough in the axial direction.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kortmann (DE 29502331 U1) in view of Barton (US. 3528,668).

Kortmann discloses the invention substantially as claimed above and further discloses a method of forming a seal in an annular space between a pipe extending axially through a cylindrical hole and the pipe is positioned eccentrically in the hole (pipe inserted in hole of body 4). The steps comprising selecting resilient compressible elastomer seal member having blocks (this is the case since the sealing element 1 is formed of pivot clamp casing 9 and 10 that are pivoted to be placed on the member 3) to form a ring of blocks surrounding the pipe (3) in the hole, the blocks having a fixed height (height of block), a selected thickness (each block has a thickness) and a selected width (the width and thickness vary for sealing element 1). The method having another step of inserting a smallest thickness block in a portion of the annular

Art Unit: 3676

space between the pipe and the opening comprising a smallest radial dimension (smallest radial dimension between the body 4 and the member 3 that has a smallest portion of the sealing ring 1), with the thickness direction of the block arranged radially, the height direction arranged axially, and the width direction arranged circumferentially relative to the pipe (as seen in figures). The method having a further step of inserting, in a similar orientation, a largest thickness block in a greatest radial dimension between the pipe and the opening (largest radial dimension between body 4 and the member 3 that has a largest portion of the sealing ring 1). The angular width of the selected plurality of blocks, when joined together in a ring, comprising approximately 360 degrees (the blocks form a ring). The method having another step of inserting a bolt (18) through the height of each block parallel to the axis of the pipe and thereafter, tightening the bolts so as to compress the blocks in the axial direction, causing the blocks to expand in the radial and circumferential directions such that the blocks will completely fill the annular space between the pipe and the hole to effect a seal therebetween (seal formed by 1 after the bolts 18 are tightened). The step of connecting adjacent blocks together prior to inserting any of the blocks into the annular space (this would be the case since the blocks are held together by bolts and then placed on 3). A first and a last block are connected together to form a ring of blocks, after the blocks have been inserted into the annular space (this is the case since 9 and 10 are connected to form a ring that is placed on 3). The ring has a varying width. The blocks (9 and 10) are interconnected to each other. The method further having a step of measuring an outer diameter of the pipe (outer diameter of 3), an inner diameter of the hole (inner diameter of the hole) and measuring the smallest distance or a greatest distance between the pipe and the hole (this is the case as seen in figures 6-10). These measurements will provide

Art Unit: 3676

data to select the smallest dimension of the seal member having the blocks and the largest dimension of the seal member having the blocks. The seal member having an arc shape in the circumferential direction (this is the case since the sealing member is annular and surrounds member 3 which is cylindrical).

Kortmann discloses the invention substantially as claimed above but fails to disclose that the sealing element can be formed into multiple or plurality of blocks, so as to provide intermediate blocks between the smallest and largest blocks and all the blocks are interconnected. The block has an overhanging portion at one end and a projecting portion at an opposite end with a passage extending axially through the overhanging portion and the projecting portion, such that when the blocks are positioned adjacent to one another, the overhanging portion of the one block will overlie the projecting portion of the other block and the passages will align. Barton teaches that a seal having blocks that are formed by segmented the seal by a single slit (figure 10) or a seal formed by multiple of blocks (all the rings of figures 1-16 are formed by plurality of blocks) having multiple slits (slits shown in figure 16), each block has an overhanging portion at one end (301x) and a projecting portion (other of 301x) at an opposite end with a passage (passages 305) extending axially through the overhanging portion and the projecting portion, such that when the blocks are positioned adjacent to one another (as seen in figure 16), the overhanging portion of the one block will overlie the projecting portion of the other block and the passages will align (the passages 305 are aligned). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the sealing element of Kortmann to have plurality of blocks to provide intermediate blocks and the blocks having overhanging portions and projecting portions that intermesh and a passage that

Art Unit: 3676

aligns to receive the blot through the overhanging portion and projection portion as taught by Barton to provide sealing for different pipe sizes (column 2, lines 61-64 of Barton) and a more economical sealing member (column 3, lines 1-22 of Barton).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mainprize, Griffiths, Gignac et al, Shorey et al and Richter et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is (703) 308-8495. The examiner can normally be reached on Monday through Friday from 7:30 PM to 4:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann, can be reached on (703) 306-4115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168. Technology Center 3600 Customer Service is available at 703-308-1113. General Customer Service numbers are at 800-786-9199 or 703-308-9000. Fax Customer Service is available at 703-872-9325.


Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: 703-872-9326, for formal communications for entry before Final action: or,
703-872-9327, for formal communications for entry after Final action.

Hand-delivered responses should be brought to Crystal Park Five, 2451 Crystal Drive, Arlington, Virginia, Seventh Floor (Receptionist suite adjacent to the elevator lobby).

VP
October 20, 2004


Vishal Patel
Patent Examiner
Tech. Center 3600